Big Mountain Resort Presentation

Recommendations for ticket price change and revenue intake

Context

- Big Mountain Resort has recently installed an additional chair lift
- Help increase distribution of visitors across mountain
- Additional chair lift increases operating costs by $1,540,000 this season

Problem

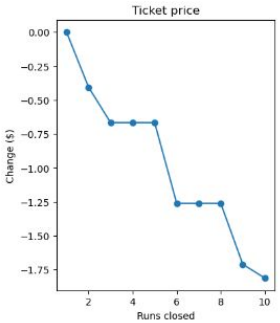
- Big Mountain Resort is considering alternative strategies on how to optimize ticket prices in order to combat increasing operational costs
- Which strategy should we choose?
- Ideal to avoid charging a premium above the average price

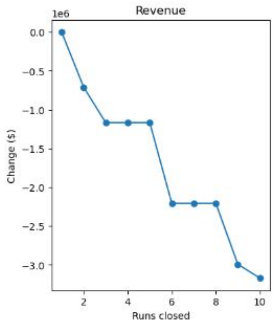
Recommendation

- I would recommend that Big Mountain Resort add a run, increase the vertical drop by 150 feet and install and additional chair lift.
- Additionally, I recommend an increased ticket price of $1.99
    - Expected to bring in $3,474,638 of revenue

Scenario 1: Closing up to 10 runs

- Closing down up to 10 runs does not support increase in ticket price nor does it increase revenue
- Not a recommended strategy





Scenario 2

```
ticket2_increase = predict_increase(['Runs', 'vertical_drop', 'total_chairs'], [1, 150, 1])
revenue2_increase = 5 * expected_visitors * ticket2_increase
```

```
print(f'This scenario increases support for ticket price by ${ticket2_increase:.2f}')
print(f'Over the season, this could be expected to amount to ${revenue2_increase:.0f}')
```

```
This scenario increases support for ticket price by $1.99
Over the season, this could be expected to amount to $3474638
```

- This scenario consists of adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift
- Scenario increases support for ticket price by $1.99
- Expected revenue comes to $3,474,638

Scenario 3

```
ticket3_increase = predict_increase(['Runs', 'vertical_drop', 'total_chairs', 'Snow Making_ac'], [1, 150, 1, 2])
revenue3_increase = 5 * expected_visitors * ticket3_increase
```

```
print(f'This scenario increases support for ticket price by ${ticket3_increase:.2f}')
print(f'Over the season, this could be expected to amount to ${revenue3_increase:.0f}')
```

```
This scenario increases support for ticket price by $1.99
Over the season, this could be expected to amount to $3474638
```

- This scenario is exactly the same as scenario 2, but with the addition of 2 acres of snow making
- The model suggests the same increase in ticket price with the same predicted revenue

Scenario 4

```
predict_increase(['LongestRun_mi', 'Snow Making_ac'], [0.2, 4])
```

```
0.0
```

- This scenario consists of increasing the longest run by 0.2 miles and adding 4 acres of snow making capability
- The model predicts that there will be 0 increase in revenue given this scenario

Conclusion

- I would recommend that Big Mountain Resort add a run, increase the vertical drop by 150 feet and install and additional chair lift
- This scenario would bring about the most revenue
- A more cost and resource efficient strategies than the other strategies